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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,115	09/19/2003	Russell Norman Mirov	SUN03-0112	8531
57960 7590 06/12/2009 PVF -- SUN MICROSYSTEMS INC. C/O PARK, VAUGHAN & FLEMING LLP 2820 FIFTH STREET DAVIS, CA 95618-7759				
EXAMINER				
DINH, TUAN T				
ART UNIT		PAPER NUMBER		
2841				
MAIL DATE		DELIVERY MODE		
06/12/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/667,115

Applicant(s)

MIROV, RUSSELL NORMAN

Examiner

Tuan T. Dinh

Art Unit

2841

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,7,34-39 and 41-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,7,34-39 and 41-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specie I, figure 1 has been elected by Applicant in the response filed on 10/31/05.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "identification mechanism is encapsulated...., claim 7, line 2" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-2, 7, 34-38, 41-54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, lines 6-9, it is unclear. The phrase of "one or more removal ...from the circuit board" is not understood. What does applicant mean of "...for breaking the substrate in a predefined boundary between the key area and the circuit board to permanently detach the key area from the circuit board? Since as recited in line 3 that the key area of the substrate of the circuit board, the key area is belong in the define area of the cir circuit board, so when the removal feature of the substrate of the circuit board is breaking, the signal trace routed on the area including the removal feature is breaking that meaning the circuit board is breaking too, and when the circuit board is breaking then the circuit board being useless. It is contradiction. Please, clarify the claimed language.

Regarding claim 34, lines 15-16, it is unclear. The phrase of "the tab is removed by breaking the substrate in the specific area" is not understood, since as recited

in claim 34, lines 3-14 that describes the structure of the tab, so when the tab being removed and breaking then the tab being useless.

Regarding claim 43, lines 17-18, it is unclear. The phrase of "the key is removed by breaking the substrate in the specific area" is not understood, since as recited in claim 43, lines 13-16 that describes the structure of the key, so when the key being removed and breaking then the tab being useless.

Regarding claim 44, lines 14-15, it is unclear. The phrase of "the key is removed by breaking the substrate in the specific area" is not understood, since as recited in claim 43, lines 13-16 that describes the structure of the key, so when the key being removed and breaking then the tab being useless.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Matson et al. (U.S. Patent '112) as in the record.

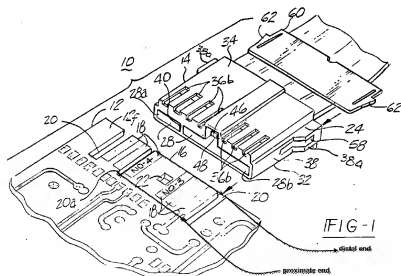
As best understood to claims 1-2, Matson discloses a circuit board (12, column 2, line 7) as shown in figures 1-2 comprising: a substrate which includes a specified area of the substrate that is used as a mechanism (16, column 2, line 9) comprising:

signal means for (wire traces 18, and circuitries formed in/on the circuit board 12) conducting a signal between the mechanism (16) and the circuit board (12), the traces being routed on the mechanism; and

separation means (gaps 20, column 2, line 15) for facilitating detachment of the mechanism (16) from the circuit board (12) wherein the mechanism (16) **is configured to be** detached by breaking the substrate at the specified area (the mechanism adapted to be broke then the circuit board being broke then the circuit board cannot be used anymore);

identification means for (labels No.1-No.6, figure 1 shows the label No.3 and No.4) identifying the mechanism (16);

wherein the circuit board becomes at least partly non-functional if the mechanism is detached from the circuit board.



Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 49-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matson ('112).

As to claims 49-53, Matson discloses all of the limitation of the claimed invention, except for the identification comprises a hologram or barcode. However, the barcode or hologram is well known in the art that provide an identification or logo for the product. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a barcode or hologram to modify the labels as taught by Matson for the purpose of verifying or identification product.

8. Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matson ('112) in view of O'Connor et al. (U.S. Patent 6,450,704).

Matson discloses all of the limitations except for the trace being as an optical trace. O'Connor et al. teach a transparent substrate comprising an optical trace (see column 2, lines 1-14). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a teaching of O'Connor et al employed in

the circuit board of Matson in order to provide a receive or transmit signal to the components mounted on the circuit board.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matson in view of Marrs et al. (U.S. Patent 5,355,283).

Matson discloses all of the limitations except for the identification chip being encapsulated. Marrs teaches a BGA with via interconnection comprising a chip being encapsulated mounted on a substrate. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a teaching of Marrs employed in the circuit board of Matson in order to provide a protection for the chip from external impact.

Allowable Subject Matter

10. Claims 34-39, 41-48 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Response to Arguments

11. Applicant's arguments filed 03/24/09 have been fully considered but they are not persuasive.

Applicant argues for claims 1, 34, 43, and 44:

Because claim 1 recites a circuit board comprising a mechanism FOR provably disabling the circuit board therefore the circuit board indeed becomes useless when the key is removed.

Examiner disagrees because the "FOR (plus function) provably disabling the circuit board" has not been given patentable weight and is narrative in form. In order to given patentable weight, a function recitation must be expressed as a "mean for" performing the specified function, as set forth in 35 USC 112 six paragraph, and must be support by recitation in the claim of sufficient structure to warrant the presence of the functional language. In re Fuller, 1929 C.D. 172; 388 O.G. 279.

Further, as rejected by 112, 2 paragraph as above, by breaking the key or tab that causes breaking the wiring/signal/optical circuit or trace formed on at least a portion of the substrate of the circuit board containing the key or tab so that cause short circuit to either the substrate or the circuit board. Therefore, the substrate or the circuit board are useless.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Dinh whose telephone number is 571-272-1929. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reichard Dean can be reached on 571-272-1984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tuan T Dinh/
Primary Examiner, Art Unit 2841.